Biodiversity Hotspots in India

Himalayas

● The **youngest and highest mountain chain** on Earth, **stretches in an arc across** northern Pakistan; Nepal; Bhutan; the northwestern and northeastern states of India adjoining Myanmar; and the southwest China border in the east.

● Home to important populations of numerous large bird and mammal species, including vultures, tigers, rhinos and wild water buffalo.

● Many unique and diverse human groups are also found here. **Nepal** counts more than 27 ethnic groups, **either of Tibetan-Burmese or Indo-Aryan descent,** while **Bhutan has three main ethnic groups—the Ngalongs, Sharchogpas and Lhotsampas**. The northeast part of India, meanwhile, has more than 500 distinct ethnic groups.

Western Ghats and Sri Lanka

● Western Ghats, **a biogeographically important formation of the Gondwanaland,** is formed of the Malabar plains and the chain of mountains running parallel to India's west coast, about 30 to 50 km inland.

● The Western Ghats **indigenously known as 'Sahyadri'**, starts downwards from the Tapti River in Gujarat to the country's southernmost tip Kanyakumari in Tamil Nadu.

● It is interrupted by a number of natural gaps and passes, and the **widest being the Palakkad (Palghat) Gap**.

● The Agasthyamalai hills, Nilgiris, Anamalai hills, Palani hills, Meghamalai, Cardamom hills, Silent Valley– New Amarambalam forests, Wyanad–Kodagu, Shimoga–Kanara, Konkan and Mahabaleshwar–Khandala are some of chief centres of plant diversity and endemism in the Western Ghats.

● The 'Western Ghats' is a **world heritage site**.

● Sri Lanka is a continental island **separated from southern India by the 20-meter-deep Palk Strait**.

Indo-Burma

● Covers Myanmar, Thailand, Cambodia, Vietnam, Laos PDR and includes the Gangetic plains, areas around the Brahmaputra River and parts of Andaman and Nicobar Islands.

● The **limestone karst formations** that are found throughout the hotspot support highly unique ecosystems, with high levels of endemism, particularly among plants, reptiles and molluscs.

Sundaland

● Politically, the hotspot **covers** a small portion of southern Thailand; nearly all of Malaysia; Singapore; Brunei; and the western half of Indonesia. The **Nicobar Islands,** which are under Indian jurisdiction, are also included. Interestingly, it extends to the tectonic plates under the Indian Ocean.

● The hotspot is **home to iconic species** like orangutans, pig-tailed langurs, Javan and Sumatran rhinos, and proboscis monkeys found only in Borneo.

● Sundaland also has the distinction of **being home to the world's largest flowers,** the rafflesia, which measure one metre across.

Map labels

TAJIKISTAN, AFGHANISTAN, PAKISTAN, CHINA, NEPAL, BHUTAN, BANGLADESH, INDIA, MYANMAR, VIETNAM, LAOS, THAILAND, CAMBODIA, ANDAMAN & NICOBAR ISLANDS, SRI LANKA, BRUNEI, MALAYSIA, SINGAPORE, INDONESIA

FACTS

● The term 'biodiversity hotspot' was **coined by Norman Myers** (1988).

● The **Conservation International** (non-profit organization) in association with Myers made the first systematic update of the hotspots.

● There are **currently 36 recognized biodiversity hotspots**. To qualify as a biodiversity hotspot, an area **must meet two strict criteria**:
  ● Contain at least 1,500 species of vascular plants found nowhere else on Earth (known as "endemic" species).
  ● Have lost at least 70 percent of its primary native vegetation.

● **Biodiversity Hotspots in India (4):** The Himalayas, The Western Ghats and Sri Lanka, The Indo-Burma and The Sundaland.

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